
Breast and Cervical Cancer Screening

NO MAMMOGRAM

Definition: Women respondents, ages 40 and older, who have not had a mammogram in the last two years.

Prevalence of No Mammogram

- South Dakota 22.9%
- There is no nationwide percent for no mammogram

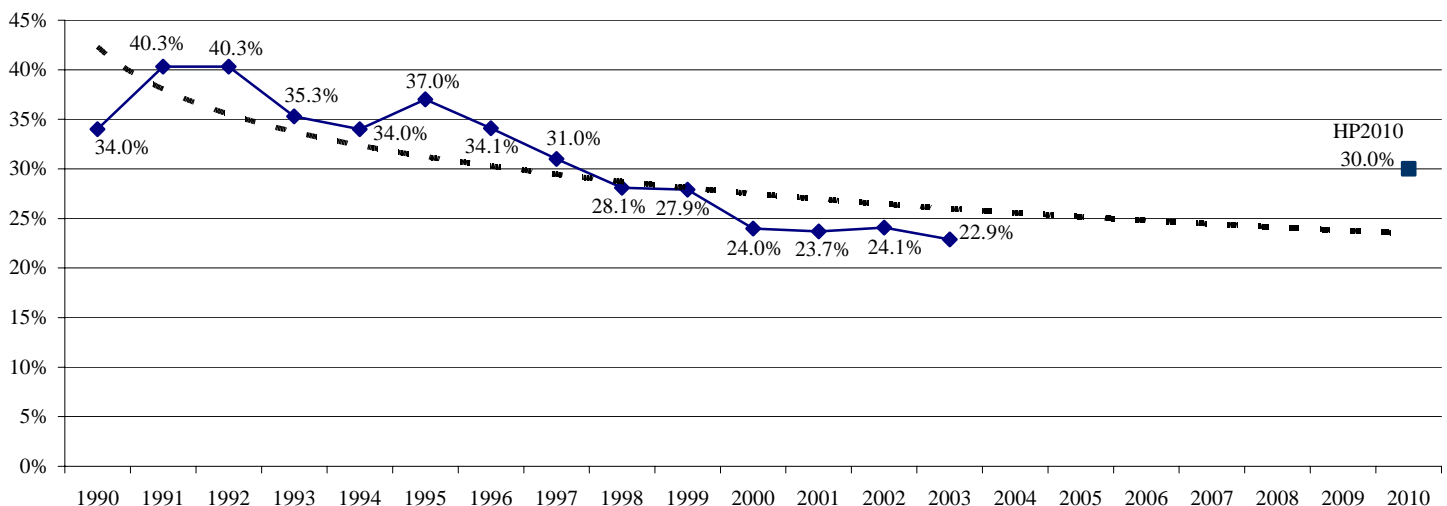
Healthy People 2010 Objective

Decrease the proportion of women aged 40 years and older who have not received a mammogram within the preceding 2 years to 30 percent.

Trend Analysis

Overall, the percent of women respondents who have not had a mammogram in the past two years has been decreasing since the question was first asked in 1990. In 1998, South Dakota met the *Healthy People 2010 Objective* of 30 percent. South Dakota continues to decrease the percent of women who have not had a mammogram in the past two years reaching a low in 2003 with 22.9 percent.

Figure 33
Percent of Women Respondents, Ages 40 and Older, Who Have Not Had a Mammogram in the Past 2 Years, 1990-2003



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1990-2003

Demographics

Age Lack of mammograms decrease as age increases with the exception of those 75 years and older. There is a substantial increase in insufficient mammograms from the 65-74 year old population to the 75 and older age group.

Race	There are no appreciable racial differences demonstrated by the available data.
Region	There are no considerable differences among the five geographic regions.
Household Income	Mammogram insufficiency seems to generally decrease as household income increases although the data tend to fluctuate somewhat.
Education	Mammogram insufficiency decreases as education levels increase. This includes a large decrease as high school education is achieved.
Employment Status	There are no substantial differences among the different types of employment status.
Marital Status	There are no appreciable differences among the various marital status.

Table 35 Women Respondents, Ages 40 and Older, Who Have Not Had a Mammogram in the Past 2 Years, 2003									
	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Total	2,190	22.9	(20.9-24.9)	-	-	-	2,190	22.9	(20.9-24.9)
Age									
18-24	-	-	-	-	-	-	-	-	-
25-34	-	-	-	-	-	-	-	-	-
35-44	308	35.0	(29.4-41.0)	-	-	-	308	35.0	(29.4-41.0)
45-54	551	21.5	(17.9-25.6)	-	-	-	551	21.5	(17.9-25.6)
55-64	460	15.1	(12.0-18.9)	-	-	-	460	15.1	(12.0-18.9)
65-74	414	14.0	(10.7-18.2)	-	-	-	414	14.0	(10.7-18.2)
75+	457	28.5	(24.1-33.4)	-	-	-	457	28.5	(24.1-33.4)
Race									
White	2,040	22.4	(20.4-24.5)	-	-	-	2,040	22.4	(20.4-24.5)
American Indian	100	32.8	(22.8-44.8)	-	-	-	100	32.8	(22.8-44.8)
Region									
Southeast	539	20.4	(17.0-24.4)	-	-	-	539	20.4	(17.0-24.4)
Northeast	617	23.1	(19.7-26.9)	-	-	-	617	23.1	(19.7-26.9)
Central	290	22.9	(17.8-28.8)	-	-	-	290	22.9	(17.8-28.8)
West	591	25.5	(21.9-29.6)	-	-	-	591	25.5	(21.9-29.6)
American Indian Counties	153	28.6	(21.1-37.6)	-	-	-	153	28.6	(21.1-37.6)
Household Income									
Less than \$15,000	296	32.2	(26.5-38.6)	-	-	-	296	32.2	(26.5-38.6)
\$15,000-\$19,999	221	21.3	(16.0-27.7)	-	-	-	221	21.3	(16.0-27.7)
\$20,000-\$24,999	255	27.2	(21.2-34.1)	-	-	-	255	27.2	(21.2-34.1)
\$25,000-\$34,999	329	22.7	(18.0-28.3)	-	-	-	329	22.7	(18.0-28.3)
\$35,000-\$49,999	350	19.2	(14.9-24.3)	-	-	-	350	19.2	(14.9-24.3)
\$50,000-\$74,999	265	23.3	(18.2-29.4)	-	-	-	265	23.3	(18.2-29.4)
\$75,000+	183	15.2	(10.3-21.7)	-	-	-	183	15.2	(10.3-21.7)
Education									
Less than High School	243	34.2	(27.7-41.4)	-	-	-	243	34.2	(27.7-41.4)
High School or G.E.D.	768	23.7	(20.4-27.2)	-	-	-	768	23.7	(20.4-27.2)
Some Post-High School	651	23.3	(19.8-27.2)	-	-	-	651	23.3	(19.8-27.2)
College Graduate	524	16.3	(13.2-20.0)	-	-	-	524	16.3	(13.2-20.0)
Employment Status									
Employed for Wages	1,001	23.2	(20.4-26.3)	-	-	-	1,001	23.2	(20.4-26.3)
Self-employed	158	23.2	(16.8-31.1)	-	-	-	158	23.2	(16.8-31.1)
Unemployed	*	*	*	-	-	-	*	*	*
Homemaker	169	22.5	(16.4-30.1)	-	-	-	169	22.5	(16.4-30.1)
Retired	767	22.2	(19.0-25.8)	-	-	-	767	22.2	(19.0-25.8)
Unable to Work	*	*	*	-	-	-	*	*	*

Table 35 (continued)
Women Respondents, Ages 40 and Older, Who Have Not Had a Mammogram in the Past 2 Years, 2003

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Marital Status									
Married/Unmarried Couple	1,198	21.3	(18.9-24.0)	-	-	-	1,198	21.3	(18.9-24.0)
Divorced/Separated	313	24.8	(19.6-30.7)	-	-	-	313	24.8	(19.6-30.7)
Widowed	575	26.1	(22.3-30.4)	-	-	-	575	26.1	(22.3-30.4)
Never Married	103	26.1	(17.4-37.3)	-	-	-	103	26.1	(17.4-37.3)

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

Note: *Results based on sample sizes less than 100 have been suppressed.

Further Analysis

Following are data illustrating the percent of those women who have not had a mammogram in the past two years for various health behaviors and conditions. For example, 57.5 percent of women respondents who stated they have no health insurance have not had a mammogram in the past two years, while 20.4 percent of women respondents who have health insurance have not had a mammogram in the past two years.

Table 36
No Mammogram, Ages 40 and Older, in Past 2 Years for Selected Health Behaviors and Conditions, 2003

Health Behavior or Condition	# Respondents	% No Mammogram	95% CI
Fair or Poor Health Status	398	24.3	19.9-29.5
Excellent, Very Good, or Good Health Status	1,783	22.5	20.4-24.8
Obese	520	22.9	19.1-27.3
Overweight	1,212	21.6	19.1-24.4
Not Overweight	843	24.6	21.5-27.9
No Leisure Time Physical Activity	583	29.2	25.1-33.7
Leisure Time Physical Activity	1,606	20.7	18.6-23.0
No Moderate Physical Activity	1,253	25.1	22.5-28.0
Moderate Physical Activity	884	19.4	16.6-22.4
No Vigorous Physical Activity	1,897	24.2	22.1-26.4
Vigorous Physical Activity	283	14.8	10.9-19.8
Not Doing Anything to Control Weight	449	35.2	30.4-40.3
Trying to Lose or Maintain Weight	1,736	20.0	17.9-22.2
Less Than Five Servings of Fruits and Vegetables	1,609	23.9	21.6-26.4
At Least Five Servings of Fruits and Vegetables	581	20.0	16.6-23.9
Current Smoker	376	34.3	29.0-40.0
Former Smoker	557	20.9	17.4-24.9
Never Smoked	1,254	20.7	18.2-23.3
Smokeless Tobacco Use	*	*	*
No Smokeless Tobacco Use	2,172	22.8	20.8-24.8
Drank Alcohol in Past 30 Days	1,012	19.8	17.2-22.8
No Alcohol in Past 30 Days	1,173	25.7	23.0-28.6
Binge Drinker	*	*	*
Not a Binge Drinker	2,085	22.6	20.6-24.6
Heavy Drinker	*	*	*
Not a Heavy Drinker	2,138	22.7	20.8-24.8
Hypertension	840	19.8	16.8-23.2
No Hypertension	1,347	24.6	22.2-27.3
High Blood Cholesterol	750	15.6	12.8-18.9
No High Blood Cholesterol	1,213	22.1	19.6-24.8

Table 36 (continued)
No Mammogram, Ages 40 and Older, in Past 2 Years for Selected Health Behaviors and Conditions, 2003

Health Behavior or Condition	# Respondents	% No Mammogram	95% CI
Insufficient Cervical Cancer Screening	244	71.7	64.7-77.7
Sufficient Cervical Cancer Screening	1,244	16.7	14.5-19.2
No Health Insurance (18-64)	111	57.5	46.9-67.4
Health Insurance (18-64)	1,202	20.4	18.0-23.0
Employer Based Health Insurance Coverage (18-64)	877	19.7	17.0-22.8
Private Plan (18-64)	183	21.4	15.7-28.6
Medicaid or Medical Assistance (18-64)	*	*	*
The military, CHAMPUS, TriCare, or the VA (18-64)	*	*	*
The Indian Health Service (18-64)	*	*	*
No Flu Shot (65+)	209	38.8	31.7-46.4
Flu Shot (65+)	661	17.3	14.3-20.9
No Pneumonia Shot (65+)	309	29.8	24.5-35.8
Pneumonia Shot (65+)	546	18.4	14.9-22.5
Diabetes	225	19.0	13.8-25.5
No Diabetes	1,964	23.3	21.2-25.4
Current Asthma	169	21.9	15.6-29.8
Former Asthma	*	*	*
Never Had Asthma	1,960	23.0	20.9-25.1
Arthritis	1,029	18.3	15.8-21.1
No Arthritis	1,154	26.6	23.8-29.5
Arthritis - Activities Limited	500	18.8	15.2-23.0
No Arthritis - Activities Limited	1,682	24.0	21.8-26.4
Disability - Activities Limited	592	22.8	19.1-26.9
No Disability - Activities Limited	1,596	22.9	20.6-25.3
Disability with Special Equipment Needed	226	28.3	22.2-35.3
No Disability with Special Equipment Needed	1,963	22.3	20.2-24.4
Injured in a Fall (45+)	117	14.7	9.1-22.7
Not Injured in a Fall (45+)	1,763	20.8	18.7-23.0
Sunburn in Past 12 Months	542	23.5	19.7-27.7
No Sunburn in Past 12 Months	1,640	22.7	20.5-25.1
Military Veteran	*	*	*
Not a Military Veteran	2,148	22.9	21.0-25.0

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

Note: *Results based on sample sizes less than 100 have been suppressed.

Table 37, on the next page, displays women respondents' most important reason for not having a mammogram in the past year. In 2003 and 2002, women respondents stated the most important reason for not having a mammogram is that it was not needed/not necessary with 28.2 percent and 25.7 percent, respectively. However, in 2001 and 2000, women respondents stated the most important reason for not having a mammogram is that it was not recommended by doctor/doctor never said it was needed with 26.4 percent and 28.4 percent, respectively.

Table 37
Women Respondents' Most Important Reason for Not Having a Mammogram in Past Year, 2000-2003

	2003	2002	2001	2000
Number of respondents	619	512	478	529
Not needed/not necessary	28.2%	25.7%	23.1%	28.0%
Procrastination	26.7%	0.0%	0.0%	0.0%
Not recommended by doctor/doctor never said it was needed	19.3%	22.8%	26.4%	28.4%
Cost	9.6%	9.9%	5.7%	8.1%
No insurance to pay for it	2.8%	3.1%	3.3%	2.2%
Never heard of mammogram	0.4%	0.0%	0.0%	0.0%
Other	13.0%	38.5%	41.5%	33.3%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2003

Note: Procrastination was included in the "other" category from 2000 to 2002.

Since 2000, the majority of women respondents stated it was their idea to have a mammogram. However, this percent decreased from 57.7 percent in 2000 to 52.5 percent in 2003 as illustrated below in Table 38.

Table 38
Person Who Recommended the Mammogram, 2000-2003

	2003	2002	2001	2000
Number of respondents	2,131	1,878	1,945	1,926
Respondent's idea	52.5%	56.9%	56.3%	57.7%
Doctor's idea	44.1%	39.7%	41.1%	39.8%
Someone else's idea	3.4%	3.4%	2.6%	2.4%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2003

INSUFFICIENT CERVICAL CANCER SCREENING

Definition: *Women Respondents, ages 18 and older, who have not received a Pap test within the past three years.*

Prevalence of Insufficient Cervical Cancer Screening

- South Dakota 14.6%
- There is no nationwide percent for insufficient cervical cancer screening

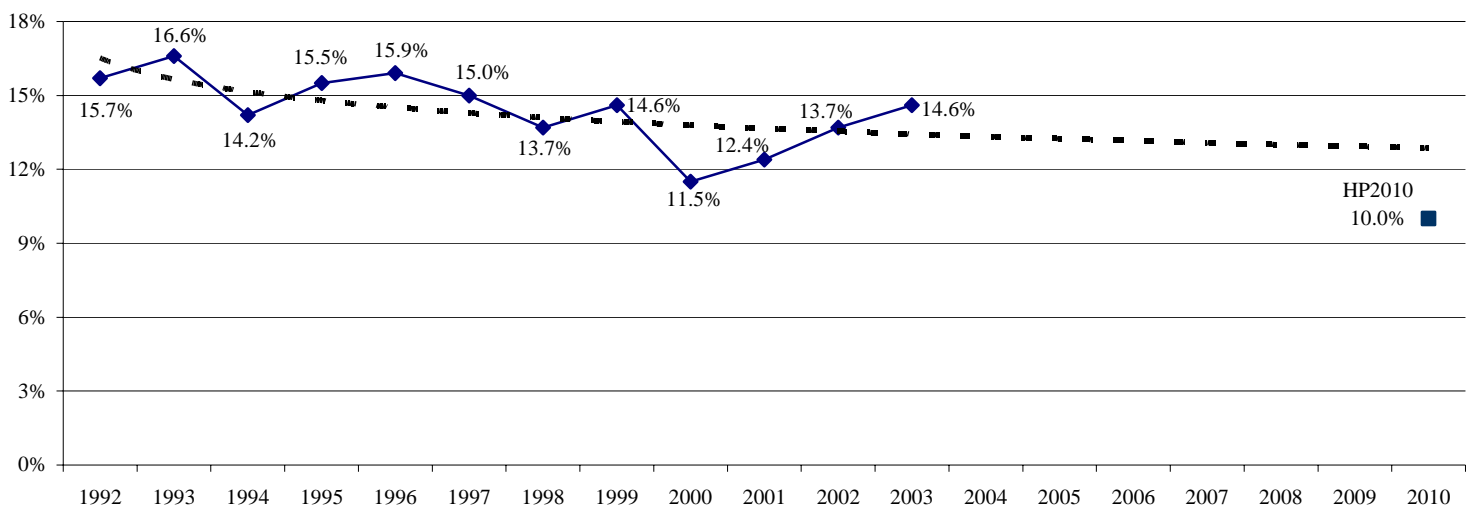
Healthy People 2010 Objective

Decrease the proportion of women aged 18 years and older who have not received a Pap test in the preceding 3 years to 10 percent.

Trend Analysis

Overall, the percent of women respondents who have had insufficient cervical cancer screening has been increasing since its low of 11.5 percent in 2000. South Dakota has not met the *Healthy People 2010 Objective* of 10 percent.

Figure 34
Percent of Women Respondents Who Had Insufficient Cervical Cancer Screening, 1992-2003



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1992-2003

Demographics

Age Insufficient cervical cancer screening increases as age increases with the exception of the 18-24 age group, who demonstrate a substantially higher rate of insufficient cervical cancer screening than the 25-34 age group. In addition, insufficient cervical cancer screening takes a considerable increase from the 65-74 age group to the 75 and older group.

Race There are no appreciable racial differences demonstrated by the available data.

Region There are no considerable differences among the five geographic regions.

Household Income	Insufficient cervical cancer screening generally decreases as household income increases.
Education	Insufficient cervical cancer screening decreases as education levels increase.
Employment Status	Those who are retired demonstrate the highest rate of insufficient cervical cancer screening.
Marital Status	Those who are widowed and never been married show the highest rate of insufficient cervical cancer screening.

Table 39 Women Respondents Who Had Insufficient Cervical Cancer Screening, 2003									
	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Total	2,232	14.6	(12.8-16.5)	-	-	-	2,232	14.6	(12.8-16.5)
Age									
18-24	167	23.2	(16.3-31.9)	-	-	-	167	23.2	(16.3-31.9)
25-34	343	5.8	(3.7-9.1)	-	-	-	343	5.8	(3.7-9.1)
35-44	460	9.2	(6.7-12.3)	-	-	-	460	9.2	(6.7-12.3)
45-54	432	10.2	(7.2-14.2)	-	-	-	432	10.2	(7.2-14.2)
55-64	295	12.1	(8.7-16.6)	-	-	-	295	12.1	(8.7-16.6)
65-74	246	15.8	(11.3-21.5)	-	-	-	246	15.8	(11.3-21.5)
75+	272	35.8	(29.8-42.4)	-	-	-	272	35.8	(29.8-42.4)
Race									
White	2,037	14.5	(12.7-16.6)	-	-	-	2,037	14.5	(12.7-16.6)
American Indian	128	17.2	(9.2-29.8)	-	-	-	128	17.2	(9.2-29.8)
Region									
Southeast	539	13.2	(10.0-17.2)	-	-	-	539	13.2	(10.0-17.2)
Northeast	628	15.4	(12.2-19.2)	-	-	-	628	15.4	(12.2-19.2)
Central	290	17.1	(12.1-23.6)	-	-	-	290	17.1	(12.1-23.6)
West	608	14.4	(11.5-18.0)	-	-	-	608	14.4	(11.5-18.0)
American Indian Counties	167	14.7	(9.3-22.5)	-	-	-	167	14.7	(9.3-22.5)
Household Income									
Less than \$15,000	268	20.9	(15.8-27.1)	-	-	-	268	20.9	(15.8-27.1)
\$15,000-\$19,999	211	23.0	(16.8-30.6)	-	-	-	211	23.0	(16.8-30.6)
\$20,000-\$24,999	237	16.7	(11.5-23.6)	-	-	-	237	16.7	(11.5-23.6)
\$25,000-\$34,999	379	14.4	(9.9-20.6)	-	-	-	379	14.4	(9.9-20.6)
\$35,000-\$49,999	383	8.7	(6.0-12.4)	-	-	-	383	8.7	(6.0-12.4)
\$50,000-\$74,999	309	6.9	(4.2-11.3)	-	-	-	309	6.9	(4.2-11.3)
\$75,000+	191	4.2	(1.9-9.3)	-	-	-	191	4.2	(1.9-9.3)
Education									
Less than High School	186	27.8	(19.8-37.6)	-	-	-	186	27.8	(19.8-37.6)
High School or G.E.D.	708	16.2	(13.1-19.8)	-	-	-	708	16.2	(13.1-19.8)
Some Post-High School	719	13.7	(10.6-17.4)	-	-	-	719	13.7	(10.6-17.4)
College Graduate	616	9.5	(7.2-12.6)	-	-	-	616	9.5	(7.2-12.6)
Employment Status									
Employed for Wages	1,272	9.8	(8.0-11.9)	-	-	-	1,272	9.8	(8.0-11.9)
Self-employed	171	10.6	(6.4-17.2)	-	-	-	171	10.6	(6.4-17.2)
Unemployed	*	*	*	-	-	-	*	*	*
Homemaker	178	12.9	(8.3-19.4)	-	-	-	178	12.9	(8.3-19.4)
Retired	470	25.8	(21.5-30.5)	-	-	-	470	25.8	(21.5-30.5)
Unable to Work	*	*	*	-	-	-	*	*	*
Marital Status									
Married/Unmarried Couple	1,281	9.1	(7.5-10.9)	-	-	-	1,281	9.1	(7.5-10.9)
Divorced/Separated	317	11.2	(7.6-16.3)	-	-	-	317	11.2	(7.6-16.3)
Widowed	358	28.1	(23.3-33.4)	-	-	-	358	28.1	(23.3-33.4)
Never Married	275	30.4	(23.2-38.7)	-	-	-	275	30.4	(23.2-38.7)

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

Note: *Results based on sample sizes less than 100 have been suppressed.

Further Analysis

Following are data illustrating the percent of those women who had insufficient cervical cancer screening for various health behaviors and conditions. For example, 27.7 percent of women respondents who stated they do not have health insurance have had insufficient cervical cancer screening, while 9.5 percent of women respondents who have health insurance have had insufficient cervical cancer screening.

Table 40 Insufficient Cervical Cancer Screening for Selected Health Behaviors and Conditions, 2003			
Health Behavior or Condition	# Respondents	% Insufficient Cervical Cancer Screening	95% CI
Fair or Poor Health Status	265	19.9	15.0-26.1
Excellent, Very Good, or Good Health Status	1,963	13.9	12.0-16.0
Obese	468	14.1	10.8-18.1
Overweight	1,124	14.2	11.9-16.8
Not Overweight	971	15.2	12.4-18.5
No Leisure Time Physical Activity	502	18.5	14.4-23.4
Leisure Time Physical Activity	1,729	13.5	11.6-15.7
No Moderate Physical Activity	1,202	17.9	15.3-20.9
Moderate Physical Activity	980	11.0	8.7-13.7
No Vigorous Physical Activity	1,816	16.2	14.1-18.5
Vigorous Physical Activity	405	8.3	5.5-12.2
Not Doing Anything to Control Weight	435	22.9	18.4-28.0
Trying to Lose or Maintain Weight	1,792	12.6	10.7-14.8
Less Than Five Servings of Fruits and Vegetables	1,723	14.8	12.7-17.1
At Least Five Servings of Fruits and Vegetables	509	13.7	10.8-17.3
Current Smoker	496	14.5	11.2-18.7
Former Smoker	471	10.6	8.1-13.8
Never Smoked	1,262	15.9	13.4-18.8
Smokeless Tobacco Use	*	*	*
No Smokeless Tobacco Use	2,211	14.6	12.8-16.6
Drank Alcohol in Past 30 Days	1,218	9.7	7.7-12.1
No Alcohol in Past 30 Days	1,011	21.2	18.2-24.6
Binge Drinker	225	9.0	5.6-14.2
Not a Binge Drinker	2,002	15.3	13.3-17.4
Heavy Drinker	*	*	*
Not a Heavy Drinker	2,155	14.6	12.8-16.6
Hypertension	561	16.1	12.9-19.8
No Hypertension	1,669	14.2	12.2-16.5
High Blood Cholesterol	526	9.8	7.3-12.9
No High Blood Cholesterol	1,203	12.3	10.3-14.5
No Mammogram within Past Two Years (40+)	378	44.6	39.1-50.3
Mammogram within Past Two Years (40+)	1,110	6.0	4.6-7.8
No Health Insurance (18-64)	161	27.7	19.9-37.2
Health Insurance (18-64)	1,524	9.5	7.7-11.8
Employer Based Health Insurance Coverage (18-64)	1,123	8.3	6.3-10.9
Private Plan (18-64)	198	15.5	10.0-23.1
Medicaid or Medical Assistance (18-64)	*	*	*
The Military, CHAMPUS, TriCare, or the VA (18-64)	*	*	*
The Indian Health Service (18-64)	*	*	*
No Flu Shot (65+)	131	37.1	28.4-46.6
Flu Shot (65+)	386	24.0	19.5-29.2

Table 40 (continued)
Insufficient Cervical Cancer Screening for Selected Health Behaviors and Conditions, 2003

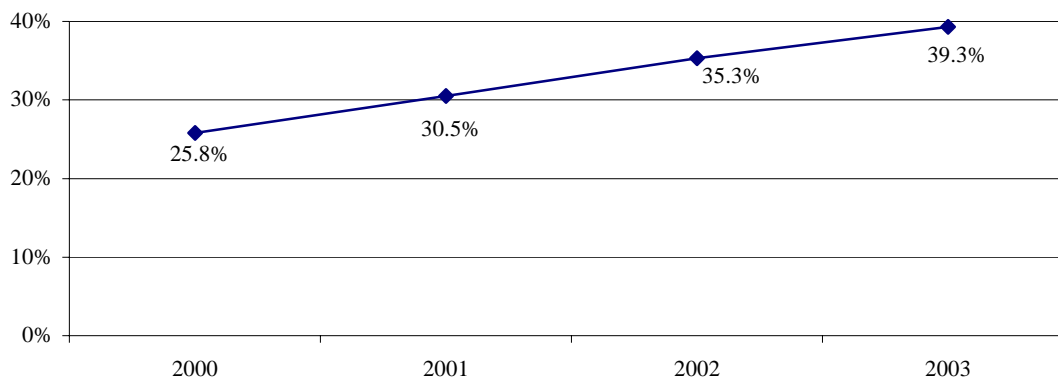
Health Behavior or Condition	# Respondents	% Insufficient Cervical Cancer Screening	95% CI
No Pneumonia Shot (65+)	202	32.7	26.0-40.2
Pneumonia Shot (65+)	310	24.1	19.1-30.0
Diabetes	135	10.7	6.3-17.7
No Diabetes	2,096	14.8	12.9-16.8
Current Asthma	149	13.7	8.8-20.7
Former Asthma	*	*	*
Never Had Asthma	2,023	14.7	12.8-16.8
Arthritis	710	15.5	12.8-18.7
No Arthritis	1,517	14.2	12.0-16.7
Arthritis - Activities Limited	323	16.7	12.7-21.8
No Arthritis - Activities Limited	1,901	14.3	12.3-16.4
Disability - Activities Limited	420	19.1	15.2-23.8
No Disability - Activities Limited	1,810	13.7	11.7-15.9
Disability with Special Equipment Needed	136	26.6	19.1-35.7
No Disability with Special Equipment Needed	2,095	14.0	12.1-16.0
Injured in a Fall (45+)	*	*	*
Not Injured in a Fall (45+)	1,197	17.4	15.1-20.0
Sunburn in Past 12 Months	831	15.4	12.3-19.2
No Sunburn in Past 12 Months	1,391	14.0	12.1-16.1
Military Veteran	*	*	*
Not a Military Veteran	2,179	14.7	12.9-16.8

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

Note: *Results based on sample sizes less than 100 have been suppressed.

Since 2000, the number of respondents who have heard of the “All Women Count” breast cancer and cervical cancer screening program has been on the rise as shown below in Figure 35. In 2003, 39.3 percent of the respondents had heard of the “All Women Count” program compared to only 25.8 percent of respondents in 2000. The “All Women Count” program pays for pap smears and mammograms for women who meet certain age and income guidelines.

Figure 35
Respondents Who Have Heard of “All Women Count” Program, 2000-2003



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2000-2003

Note: The 2002 data reflect female respondents only.